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ABSTRACT

This paper explores ways in which practitioners can use research findings in their daily jobs--to keep up to date, to support program proposals, to substantiate budget requests, to improve selection of media, to evaluate services and communication, and to compare methods of instruction in the use of materials. Specific studies are reviewed and applications of findings are suggested. A bibliography is appended. (Author)

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Research: What It Means for the Practitioner

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A common response when research is mentioned is "so what"! We all have read research studies which address seemingly meaningless questions or which disappoint with their inconclusive or inaccurate findings. This can easily lead one to be mistrustful of all research. To exercise caution in reviewing research and in accepting the conclusions drawn is a healthy attitude. It is one that insists that the questions asked are valid and that the conclusions drawn are significant. It is one which resists fads and seeks truth. It is this attitude that I hope you will maintain during this presentation. However, to distrust and discount all research on the basis of some bad experiences would be akin to throwing the baby out with the bathwater.

What, then, can research do for you? Why bother to come to a presentation on research for practitioners? I suspect that one of the reasons you've come to this session - and to this Conference - is that you are interested in new ideas and want to keep up to date with the field.

Another reason for an interest in research may be to overcome the isolation in which many of us work. Media specialists in the public schools usually practice alone, one to a school and have few contacts with others who understand the work. Contacts with fellow specialists are usually limited to a few in-service days a year and regional meetings or conferences such as this one. Knowing something about

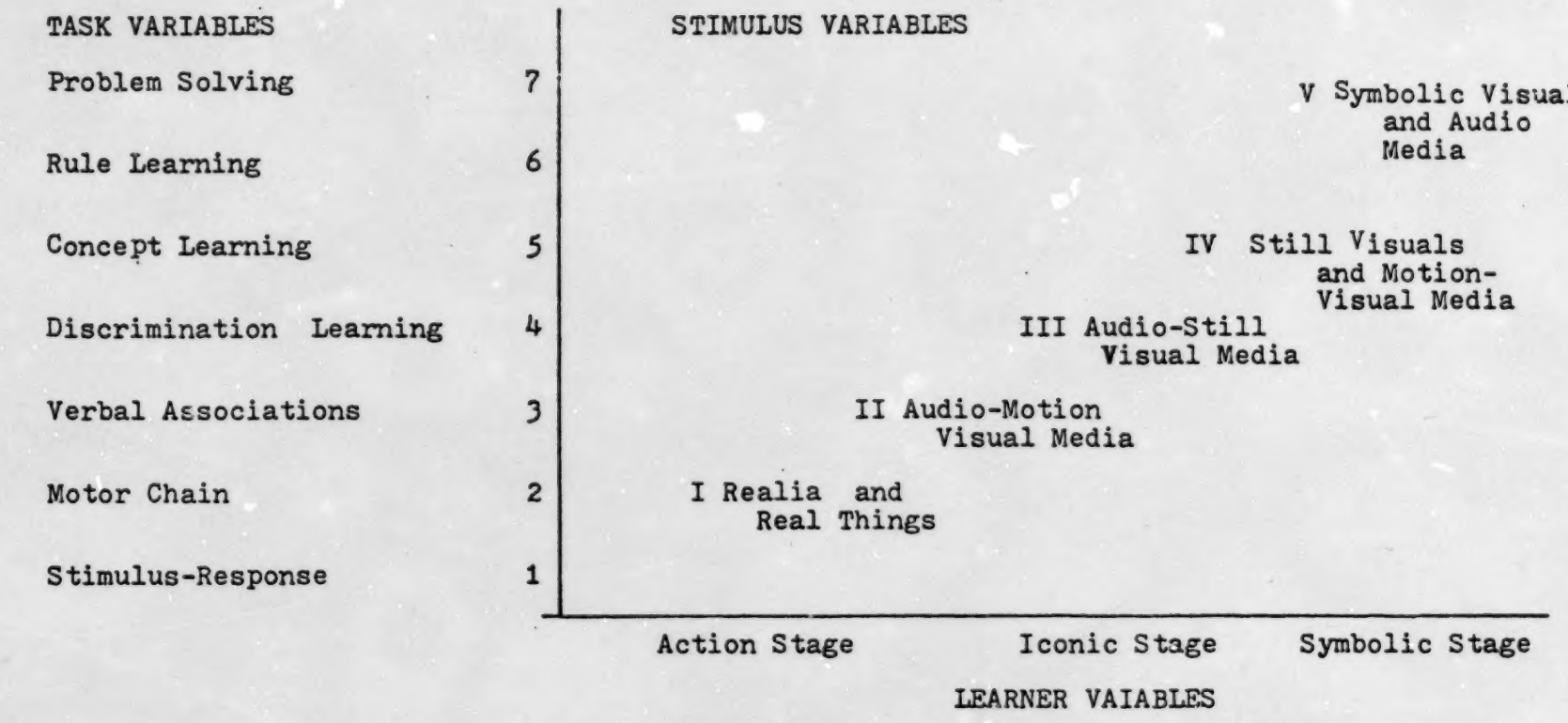
what is being done by researchers can help us feel part of the larger whole.

It is also useful to be able to quote research findings when proposing program changes to administrators. Nancy Polette, in In-Service, advised using research findings to sell them on the value of conducting in-service programs. They have been trained to be skeptical, to demand proof of ideas and research findings can provide such evidence.

You can use research to sell ideas in other ways as well. For the last few years accountability has been a by-word in educational circles. With the continuing shrinkage in enrollment (or stabilization in the public schools at lower levels than the peak years of the sixties), value for dollars expended is a significant concern. A study such as Janet Simone's (A Feasibility Study for the Centralized Processing of Print and Non-Print Materials for the Elementary School Libraries in the Allegheny Intermediate Unit) could help illustrate such accountability for an administrator.

The Allegheny Intermediate Unit consists of 46 public school districts in the county of Allegheny (in Pennsylvania). The study was limited to this area and is not generalizable to a different geographical area, although the method can become a decision making process for more general application.

This study utilized the survey research method with data collected through questionnaires and telephone interviews. The data collected was processed and analyzed by computer using the Statistical Package for the Social Sciences. Cost analysis showed that centralized processing, at the time of this study, would have saved from $6.52 to $6.96 per item



Graphic illustration of the D-Model for selection

Figure One

over the cost of individual district processing.

Another area in which research can improve the return for dollars and for time invested is that of selection of media. When inappropriate media is selected, both money and time are lost. Money that should have been spent on materials more suited to the task has been misspent. Time that a student spends using inappropriate materials is time wasted. When one considers all that a child must learn in his/her school years, there is little room for a haphazard selection of materials. To improve the ability of practitioners to select appropriate media for described tasks, Barbara Dompa developed the D-Model. (See Figure One.) This model is designed to facilitate the interaction of task, stimulus, and learner components in the selection of media in order that the messages necessary to permit the development of the learner's competencies will be discernible.

As part of this research an experiment was designed to test whether or not there would be a significant difference between novice librarians using the D-Model and novice librarians using selection aids in the choices made. The experimental design was as follows:

	Pretreatment Phase	Treatment Phase	Post-Treatment Phase
Control group	C_1	S	C_2
Experimental group	E_1	M	E_2

The pretreatment phase was a pretest administered to both groups. The treatment phase for the control group was a

one-hour review of selection aids. For the experimental group it was a one-hour explanation of the D-Model. Directly following the treatment, both groups received a post-test in which they were asked to identify appropriate media to meet eight behavioral objectives.

Analysis of the data generated revealed a statistically singificant difference between the performances of the control and experimental groups, with the experimental group out-performing the control group. From this it appears that an ability to use the D-Model can lead to improved selection of media for specific tasks, and, thus, to improved effectiveness.

Yet another use of research is in suggesting methods for evaluating and improving media services. In today's world of tight budgets, it is necessary that media specialists and librarians be aware of the effectiveness of their programs. One way to test program effectiveness and to enhance awareness of media services is to conduct a self-evaluation study.

In 1973 David Leortscher studied media center services in Indiana. For this study he prepared and administered a questionnaire regarding services offered by the school media center. The questionnaire was administered to teachers and media center staffs in nine typical Indiana schools. The questions covered the areas of accessibility, awareness, production, instruction and consultation. Media center staffs were asked to respond, on a scale of 0 to 3, whether or not a service was provided and how frequently it was provided.

Teachers were asked to respond as to whether they received the service and to what degree they were satisfied with the service. In general, media center staffs agreed among themselves about the services they were offering, but the teachers did not agree. This research showed that in the best of circumstances, only about 40 to 60% of the teachers agreed with the media staff about the services offered. (Another interesting finding was that individual differences among teachers affected library use as much as did the subject taught.)

This research indicated that a priority task for media specialists is to ensure that teachers and other users know what services are, in fact, offered. One way to alert them is to use a survey like Loertscher's, since answering a survey can enhance teacher awareness as can a follow-up report. As an outgrowth of his study Loertscher has developed, with Janet Stroud, a service called "PSES -- Purdue Self-Evaluation System for School Media Centers". From a catalog the specialist selects the survey items to use in the school. For a fee, the user will be supplied with a reproducible questionnaire and machine readable answer sheets for each person included in the survey. The answer sheets are analyzed by computer at Purdue and the results are reported to the school.

In another study, JoAnn Rogers studied the effect of teachers knowledge of media skills upon their use of media centers. She developed the School Media Center Fundamentals Test in order to determine whether "a relationship exists between possession of necessary skills, attitude toward media formats, and frequency of use of media center resources,

print and non-print." Her study should have an impact on the provision and content of both pre-service training and in-service training for teachers. The media specialist can increase teacher use of media center materials by providing appropriate in-service training.

An important group of users that should not be neglected as one strives to increase the visibility of the media program is students. Jacqueline Mancall has studied the resources used by high school students in preparing independent study projects. Library use was determined by studying bibliographies of student papers, by a questionnaire surveying the students who prepared the papers, by a questionnaire surveying the teachers involved, and by interviews with the librarians. Mancall discovered that students prefer to use monograph materials with little consideration for the currency of the materials, and that materials other then monographs and journals must be specifically brought to students' attention. An encouraging aspect of the study was that these students saw libraries as places where they can and do receive assistance.

Instruction in the use of library/media centers is an area that is becoming more popular for research. Some time ago, Corlett at the University of Portland, measured library skills as a predictor of academic success. She administered the Feagley, Curtiss, Gaver and Greene Library Orientation Test and the Brown-Holtzman Test to a sample of 81 college students enrolled in freshman English classes in a small metropolitan university (fall, 1969-70 school year). The criterion of academic success was the grade point average attained at the end of the semester. She performed correlation analysis and

multiple regression analysis. Her conclusions, from the statistical analysis of the data, were that the Library Orientation Test appeared valid for forecasting success in college. This study should be replicated to extend the population to which the findings can be generalized.

Also in the area of instruction is a study of instructional methods, by Clark Chie-Yuen Wong. He studied the effectiveness of two methods of orienting college students to the Learning Materials Center of the Community College of Denver. He used five groups with a total of 162 subjects and six librarians. The criterion measures were a written quiz and a performance exercise, both of which had been pilot tested. He used the Randomized Equivalent Groups Posttest Only true experimental design:

	ASSIGNMENT AFTER ORIENTATION	ASSIGNMENT BEFORE ORIENTATION
LECTURE METHOD	G_1	G_3
SLIDE-TAPE METHOD	G_2	G_4

Groups 1 and 3 received orientation by lecture; groups 2 and 4, by slide-tape method. Groups 1 and 2 received the performance exercise assignment after the orientation; groups 3 and 4, before the orientation.

Major findings were:

1. Students receiving orientation achieved significantly higher on the quiz than those not receiving orientation.
2. Neither method of orientation resulted in significantly different achievement on the quiz.

3. Students receiving the assignment before the orientation adieved significantly higher than those receiving the assignment after the orientation.

It should be noted that this study can only be generalized to community college students.

In 1978, Helen Gothberg reported on a study of alternative methods of teaching basic reference to library school students. The study compared the lecture method to an audio-tutorial method of instruction. Audio-tutorial units included a recorded tape, a bibliography of required readings, suggested topics for discussion, additional information sheets, a study guide and a worksheet. The results of the study showed no significant differences in the understanding of theoretical concerns, regardless of the method of instruction; no differences in the knowledge of the basic reference tools, and no differences in student satisfaction with the methodology. However, audio-tutorial students reported more satisfaction with their own performance and knowledge than did the lecture method students. A constraint on the study was contamination through an exchange of information between the control and experimental groups. Students in the lecture group believed that the audio-tutorial students had superior notes.

In a review of research, William H. Allen analyzed trends in instructional media research as reported in AV Communication Review and the Review of Educational Research during the five-year periods of 1963-73 and 1973-77. Based on his review of the published material concerning research, he concluded that

three areas receive most attention from researchers: nature and characteristics of media factors related to the design and development of media, and the relationship of media and media design to learning. He reported a move from evaluative research to research concerning the nature of media, particularly that of the pictorial image.

Commonly, aptitude-treatment interaction studies have attempted to isolate learning variables and the effect of aspects of media upon these variables. Ann DeVaney Becker has written a provocative article concerning such methods of investigation of instructional media and its effect on learning. She comments that the stimulus-response model used in such studies introduces distortion through the experimenter's attempt to control the intervening variables. According to her, the S-R model neglects the effects of intention, action and situation as variables in the learning process. She asserts that learning may be better described through language than through numbers and the reduction of data to statistics. In place of the S-R model, Becker suggests that field research techniques be used, such as case studies utilizing interviews, record or document surveys, direct observation, indirect observation and participant observation in order to provide more relevant data. The reliability of these studies may be checked by observing the agreement between different observers at different time, the agreement between different observers at the same time and the agreement between observations made by the same observer at different times.

I hope that I have presented a persuasive case for the value of research in helping us to find answers to the problems

that face us day by day. If so, I want to make this final point: research is not conducted in a vaccuum. Researchers need to hear from the field. Practitioners should provide feedback concerning what research is needed and concerning the appropriateness of the research which has been done. Only then can the contribution of research be most appreciated and utilized.

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